

Hazard Analysis and Critical Control Point Systems

- At a Glance -

HACCP principles	HACCP system steps
	1. Assemble HACCP team <ul style="list-style-type: none"> – appropriate knowledge and expertise – optimally, a multidisciplinary team – possible outsourcing – identification of the HACCP plan scope
	2. Describe product <ul style="list-style-type: none"> – relevant safety information – possible grouping of products with similar characteristics
	3. Identify intended use <ul style="list-style-type: none"> – expected use for end user or consumer – if appropriate, taking vulnerable populations into account
	4. Construct flow diagram <ul style="list-style-type: none"> – performed by the HACCP team – covering all the steps for a specific product
	5. On-site confirmation of flow diagram <ul style="list-style-type: none"> – performed by persons with sufficient knowledge
1. Conduct a hazard analysis	6. List all potential hazards associated with each step, conduct a hazard analysis, and consider any measures to control identified hazards <ul style="list-style-type: none"> – performed by the HACCP team
2. Determine the Critical Control Points (CCPs)	7. Determine Critical Control Points <ul style="list-style-type: none"> – possible application of a decision tree – modification of the process if no possible control measure for a CCP
3. Establish critical limit(s)	8. Establish critical limits for each CCP <ul style="list-style-type: none"> – specification and validation of critical limits – measurability of the critical limits
4. Establish a system to monitor control of the CCP	9. Establish a monitoring system for each CCP <ul style="list-style-type: none"> – ability to detect loss of control at the CCP – ideally, ability to detect loss of control before violating critical limits – evaluation by a person with knowledge and authority for corrective actions – sufficient frequency of monitoring – physical and chemical measurements rather than microbiological ones – records signed by the person doing the monitoring and by a responsible party
5. Establish the corrective action to be taken when monitoring indicates that a particular CCP is out of control	10. Establish corrective actions <ul style="list-style-type: none"> – so that the CCP can be brought under control – proper disposition of the affected product – procedures documented in the HACCP plan record keeping
6. Establish procedures for verification to confirm that the HACCP system is working effectively	11. Establish verification procedures <ul style="list-style-type: none"> – sufficient frequency of verification – performed by someone other than the one responsible for monitoring and corrective actions
7. Establish documentation concerning all procedures and records appropriate to these principles and their application	12. Establish documentation and record keeping <ul style="list-style-type: none"> – appropriate to the nature and size of the operation – possible integration of record-keeping in existing paperwork